

**AMENDMENTS TO THE DRAWINGS:**

The attached drawing sheets include a newly added Figure 5. In Figure 5, the previously omitted paging out of chunks of data from the virtual disk transfer system in a most-recently-used order such that a least-recently used chunk is read soonest is shown. Accordingly, the original four drawing sheets page numbering has been corrected to indicate five sheets, instead of four sheets.

No new matter has been entered.

Attachment: Replacement Drawings

### **REMARKS**

Applicants have now had an opportunity to carefully reconsider the prior art and the Examiner's comments set forth in the Office Action of March 16, 2009.

Reconsideration and reexamination of the Application are requested.

#### **The Office Action**

Applicants note that the claims 1-4 are pending in this application.

Claims 1-4 stand rejected, non-final.

Claims 1-3 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Application Publication No. 2004/0114170 to Christiansen et al. (hereinafter "Christiansen"), in view of U.S. Patent No. 5,835,691 to Matsunoshita (hereinafter "Matsunoshita"), and in further view of U.S. Patent Application Publication No. 2003/0184800 to Ohara (hereinafter "Ohara").

Claim 4 is rejected under 35 U.S.C. § 103 as being unpatentable over Christiansen in view of Matsunoshita and in further view of Ohara and in further view of U.S. Patent No. 5,142,667 to Dimperio et al. (hereinafter "Dimperio").

The drawings are objected to under 37 CFR 1.83(a) for not showing every feature of the invention specified in the claims.

Applicants appreciate that indicated prior art submitted in the Information Disclosure Statement has been considered.

#### **Differences Between Current Application and Prior Art**

The present application differs in a multitude of ways from the cited prior art. The use of predetermined facts differs. The present application uses the predetermined facts of start-up time, load balancing, optimization of printing time, and the protected versus unprotected postscript implementation. None of these are presented as predetermined facts within the presently cited prior art. The current application uses a parallel processing system which arguably may be alluded to in one of the prior references. However, the depth and extent to which parallel processing is an integral part of the current application is not taught by the current prior art cited. Furthermore, the importance of the VDISK system in use within the current present application is not

taught by any of the cited prior art. The VDISK is integral to the present system because it minimizes access to the disk memory, which is an integral aspect of the present application because limited access increases speed of data retrieval and efficiency of the system. As such, the claims have been amended and new claims 5-20 have been added to further distinguish these important relevant and integral pieces of the current application and also to further distinguish the present application from the cited prior art.

**The Claims Are Not Taught By Christiansen in View of Matsunoshita and Ohara**

Claim 1 of the present application discloses a method of operating a printing system for parallel processing of a print job. One of the key elements taught herein is the use of a virtual disk transfer system. A virtual disk storage system (VDISK) is a virtual logical disk which is used in memory allocation while memory is accessed to perform input and output operations. It creates virtual common memory addresses which may be spread out amongst several individually different and distinct physical memory devices. VDISK improves data access speed and efficiency. The present Office Action cites Ohara as teaching this and the section cited from Ohara teaches a printing system that is a virtual printing operation. The Ohara device teaches a simulated printing system which uses the print job to test whether or not the resources are available to conduct a print job and signaling the user to cease the print job if the current resources are not available. The Ohara art recites what is called a virtual printing operation. This differs from a virtual memory allocation claimed in the present application, wherein the memory space is in fact what is virtual. This differs from the Ohara reference which is essentially a test run used to determine whether or not a print action is feasible. Therefore, the claim has been amended to further clarify this distinction.

As per claim 2, the present application further comprises the steps of preventing selecting chunks from being added to the virtual disk transfer system when a monitored available space falls below a predetermined threshold representative of an overflow. The Examiner cites Ohara as teaching this and discusses the virtual printing system. However, the sections cited by the Examiner teach something different. Ohara as cited

by the Examiner determines if a sufficient number of sheets of paper remain in a printing device and/or is there sufficient ink and toner in the printing device sufficient to perform the print job. Memory is not mentioned as a constraint to the printing job being tested using the virtual printing mechanism. Therefore, these teach two entirely different concepts named similarly using the name 'virtual'; however, a virtual print job is different and patentably distinct from a virtual memory. These claims have therefore been amended to further clarify this distinction.

Claim 4 is rejected under 35 U.S.C. § 103(a) under Christiansen in view of Matsunoshita in further view of Ohara and in even further view of Dimperio. The combination of these four references to teach individual aspects of the present claim is an unreasonable use of improper hindsight on the part of the Examiner. Combining four references of same but not similar art units is merely picking and choosing elements in order to combine said elements and present a claimed teaching when in fact it would not have been obvious to combine these four elements due to the number of elements and parts taught therein.

New Figure 5 is being submitted herewith to overcome the Examiner's objection under 37 CFR 1.83(a).

**CONCLUSION**

For the reasons detailed above, it is submitted all remaining claims (Claims 1-20) are now in condition for allowance. The foregoing comments do not require unnecessary additional search or examination.

Remaining Claims, as delineated below:

(1) FOR	(2) CLAIMS REMAINING AFTER AMENDMENT LESS HIGHEST NUMBER PREVIOUSLY PAID FOR		(3) NUMBER EXTRA
TOTAL CLAIMS	20	- 20 =	0
INDEPENDENT CLAIMS	3	- 3 =	0

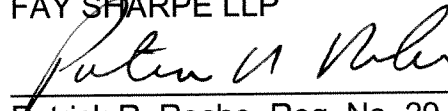
This is an authorization under 37 CFR 1.136(a)(3) to treat any concurrent or future reply, requiring a petition for extension of time, as incorporating a petition for the appropriate extension of time.

The Commissioner is hereby authorized to charge any filing or prosecution fees which may be required, under 37 CFR 1.16, 1.17, and 1.21 (but not 1.18), or to credit any overpayment, to Deposit Account 24-0037.

In the event the Examiner considers personal contact advantageous to the disposition of this case, he/she is hereby authorized to call the undersigned, at Telephone Number (216) 363-9000.

Respectfully submitted,

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July 16, 2009  
Date

Attachment